

# Intelligent Network Streaming and Execution System for Conventionally Coded Applications

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## ABSTRACT

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An intelligent network streaming and execution system for conventionally coded applications provides a system that partitions an application program into page segments by observing the manner in which the application program is conventionally installed. A minimal portion of the application program is installed on a client system and the user launches the application in the same ways that applications on other client file systems are started. An application program server streams the page segments to the client as the application program executes on the client and the client stores the page segments in a cache. Page segments are requested by the client from the application server whenever a page fault occurs from the cache for the application program. The client prefetches page segments from the application server or the application server pushes additional page segments to the client based on the pattern of page segment requests for that particular application. The user subscribes and unsubscribes to application programs, whenever the user accesses an application program a securely encrypted access token is obtained from a license server if the user has a valid subscription to the application program. The application server begins streaming the requested page segments to the client when it receives a valid access token from the client. The client performs server load balancing across a plurality of application servers. If the client observes a non-response or slow response condition from an application server or license server, it switches to another application or license server.